

Regional HIV/AIDS Epidemiologic Profile of Northeast Health Service Region, Massachusetts: 2011

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2010: Northeast Health Service Region, Massachusetts²

	N	%
People Living with HIV/AIDS	2,671	62%
People Reported with HIV or AIDS who are Deceased	1,646	38%
Total Number of People Reported with HIV Infection or AIDS	4,317	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10¹: Northeast Health Service Region, Massachusetts²

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Northeast Health Service Region, MA	7.7	98.3
Massachusetts Total	9.4	607.3
HIV/AIDS prevalence rate on 12/31/10	Rate per 100,000	Number of people living with HIV/AIDS
Northeast Health Service Region, MA	208.6	2,671
Massachusetts Total	273.7	17,621

¹ The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2000–2009, Northeast Health Service Region, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2000	1,810	53	165
2001	1,905	66	161
2002	2,021	49	165
2003	2,129	50	158
2004	2,241	44	156
2005	2,334	42	135
2006	2,415	44	126
2007	2,461	50	96
2008	2,539	33	111
2009	2,599	28	88

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 4. People diagnosed with HIV infection from 2007–2009¹ and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Northeast Health Service Region, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	192	65%	1,771	66%
Female	103	35%	900	34%
Place of Birth:	N	%	N	%
US	138	47%	1,518	57%
Puerto Rico/US Dependency ³	29	10%	388	15%
Non-US	128	43%	765	29%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	94	32%	1,188	44%
Black (non-Hispanic)	86	29%	605	23%
Hispanic/Latino	101	34%	789	30%
Other/Undetermined ⁴	14	5%	89	3%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	101	34%	812	30%
Injection Drug Use (IDU)	23	8%	528	20%
MSM/IDU	6	2%	78	3%
Heterosexual Sex	37	13%	414	15%
Other	0	0%	67	3%
Total Undetermined	128	43%	772	29%
• Presumed Heterosexual Sex ⁵	44	15%	293	11%
• Undetermined ⁶	84	28%	479	18%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2010	
Under 13	0	0%	10	<1%
13 to 19	7	2%	34	1%
20 to 24	30	10%	48	2%
25 to 29	37	13%	94	4%
30 to 34	46	16%	172	6%
35 to 39	42	14%	268	10%
40 to 44	45	15%	506	19%
45 to 49	44	15%	597	22%
50 to 54	24	8%	470	18%
55 to 59	11	4%	234	9%
60+	9	3%	238	9%
Total	295	100%	2,671	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

⁴ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity

⁵ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁶ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Northeast Health Service Region, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	934	53%	254	28%
Black (non-Hispanic)	286	16%	319	35%
Hispanic/Latino	493	28%	296	33%
Other/Undetermined ²	58	3%	31	3%
Total	1,771	100%	900	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Northeast Health Service Region, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	812	46%	N/A	N/A
Injection drug use (IDU)	341	19%	187	21%
MSM/IDU	78	4%	N/A	N/A
Heterosexual sex	109	6%	305	34%
Other	34	2%	33	4%
Total Undetermined	397	22%	375	42%
• Presumed heterosexual sex ²	N/A	N/A	293	33%
• Undetermined ³	397	22%	82	9%
Total	1,771	100%	900	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁴ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Northeast Health Service Region, Massachusetts¹, 2000–2009²

	Male		Female		Total
	N	%	N	%	
2000	112	68%	53	32%	165
2001	100	62%	61	38%	161
2002	104	63%	61	37%	165
2003	109	69%	49	31%	158
2004	95	61%	61	39%	156
2005	86	64%	49	36%	135
2006	88	70%	38	30%	126
2007	58	60%	38	40%	96
2008	76	68%	35	32%	111
2009	58	66%	30	34%	88

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Northeast Health Service Region, Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/Latino		Other/ Undetermined ³		Total
	N	%	N	%	N	%	N	%	
2000	67	41%	45	27%	41	25%	12	7%	165
2001	62	39%	51	32%	40	25%	8	5%	161
2002	63	38%	51	31%	41	25%	10	6%	165
2003	62	39%	45	28%	45	28%	6	4%	158
2004	58	37%	50	32%	42	27%	6	4%	156
2005	44	33%	48	36%	39	29%	4	3%	135
2006	57	45%	34	27%	33	26%	2	2%	126
2007	35	36%	24	25%	35	36%	2	2%	96
2008	33	30%	35	32%	33	30%	10	9%	111
2009	26	30%	27	31%	33	38%	2	2%	88

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Northeast Health Service Region, Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	84	51%	22	13%	59	36%	165
2001	79	49%	21	13%	61	38%	161
2002	78	47%	19	12%	68	41%	165
2003	76	48%	22	14%	60	38%	158
2004	77	49%	13	8%	66	42%	156
2005	60	44%	8	6%	67	50%	135
2006	74	59%	9	7%	43	34%	126
2007	43	45%	11	11%	42	44%	96
2008	52	47%	10	9%	49	44%	111
2009	43	49%	8	9%	37	42%	88

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Northeast Health Service Region, Massachusetts¹, 2000–2009²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	44	27%	27	16%	1	1%	28	17%	4	2%	21	13%	40	24%	165
2001	46	29%	17	11%	5	3%	35	22%	4	2%	23	14%	31	19%	161
2002	45	27%	23	14%	3	2%	26	16%	0	0%	30	18%	38	23%	165
2003	53	34%	31	20%	2	1%	17	11%	1	1%	14	9%	40	25%	158
2004	40	26%	18	12%	2	1%	27	17%	4	3%	22	14%	43	28%	156
2005	37	27%	10	7%	4	3%	24	18%	0	0%	26	19%	34	25%	135
2006	44	35%	13	10%	2	2%	17	13%	2	2%	18	14%	30	24%	126
2007	29	30%	13	14%	1	1%	12	13%	0	0%	16	17%	25	26%	96
2008	38	34%	6	5%	5	5%	14	13%	0	0%	18	16%	30	27%	111
2009	34	39%	4	5%	0	0%	11	13%	0	0%	10	11%	29	33%	88

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Northeast Health Service Region, Massachusetts¹, 2000–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	63	165	38%
2001	65	161	40%
2002	62	165	38%
2003	44	158	28%
2004	72	156	46%
2005	50	135	37%
2006	50	126	40%
2007	34	96	35%
2008	34	111	31%
2009	30	88	34%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Northeast Health Service Region, Massachusetts,¹ 2007–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	71	192	37%
Female	27	103	26%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	26	94	28%
Black (non-Hispanic)	21	86	24%
Hispanic/Latino	44	101	44%
Other/Undetermined ³	7	14	50%
Place of Birth:	N	N	%
US	41	138	30%
Puerto Rico/US Dependencies ⁴	17	29	59%
Non-US	40	128	31%
Total	98	295	33%

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² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

⁵ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11